Missouri Department of Natural Resources
Water Protection Program
Financial Assistance Center

Guidance on Summary of Design Data Memo for Construction Plans and Specifications for Clean Water State Revolving Fund (SRF) Funded Projects

Why Should I create a Summary of Design Data?
The purpose for providing a summary of design data is to assist the department with the review of plans and specifications for compliance with 10CSR20-8 and in determining eligibility of the proposed construction for State Revolving Fund (SRF) or Grant funding. The document will provide the review engineer with the needed information to determine compliance with applicable regulations without having to spend considerable time gathering the same information from each page of the plans and specifications. Submittal of this document along with the design plans and specifications can significantly shorten review time and minimize comment letters. The submittal of a summary of design data is purely voluntary, however, if it is not submitted, the total review time including comment letters will most likely cause delays. A summary of design data should accompany the plans and specifications for wastewater treatment facilities, sewers and pump stations.

If the engineering documents contain known deviations from 10CSR20-8, please submit the documentation and justification for the deviation with the summary of design data. Please note that many deviations are common while others are reviewed on a case by case basis. For innovative and/or new technology, the review process will be as stated in 10CSR20-8.140(5)(B).

Design data related to structural designs do not need to be included in the design summary since the department does not review structural designs. Most criteria related to mechanical and electrical designs do not need to be presented in the design summary unless addressed in 10CSR20-8.

<u>Suggested General Criteria for Summary of Design Data</u>

- **Flow and waste load projections** including estimated daily and peak flows. Please indicate if wastes other than domestic will be included.
- **Type and size of individual process units** along with hydraulic and organic loading to each individual unit. Show process diagrams, including a flow diagram with capacities. Show the basic calculations and assumptions used to size each unit.
- **Basic calculations for detention times** in each process unit and the process as a whole. Discuss other considerations such as recycle, chemical additive control, physical control, flexibility and flow metering, if applicable.
- **Expected removals and expected effluent concentration of the permit limited contaminants** in the discharge from the treatment facility.
- **Design calculations, tabulations and assumptions** for the sewer lines and pump stations.